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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/390,497	09/03/1999	GERALD HOFER	GR-97-P-1273	7018

24131 7590 01/25/2005

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EXAMINER	
SWERDLOW, DANIEL	

ART UNIT	PAPER NUMBER
2644	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/390,497	HOFER ET AL.	
	Examiner	Art Unit	
	Daniel Swerdlow	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 October 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 October 2004 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 recites the limitation "said subscriber line" in the 9th and 10th lines. There is insufficient antecedent basis for this limitation in the claim. To advance prosecution to the maximum degree possible, examiner makes prior art rejections below based on the interpretation that the recitation is intended as "said subscriber line unit".

5. Claim 8 recites the limitation "said subscriber line" in the 11th line. There is insufficient antecedent basis for this limitation in the claim. To advance prosecution to the maximum degree possible, examiner makes prior art rejections below based on the interpretation that the recitation is intended as "said subscriber line unit".

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 1, 5 and 7 are rejected under 35 U.S.C. 102(a) as being anticipated by Ozeki (Japanese Patent JP408251370A).

8. Claim 1 claims a communications system comprising at least one subscriber terminal having an input for inputting call numbers. Ozeki discloses a facsimile terminal that corresponds to the subscriber terminal claimed and has operation keys for input of a subscriber's number (i.e., an input for inputting call numbers) (paragraph 0006). Claim 1 further claims a subscriber line unit having an adjustable required transmission characteristic connected between the subscriber terminal and a transmission network. Ozeki discloses a modem section (Fig. 1, reference 11; paragraph 0007) and a network control section (Fig. 1, reference 12; paragraph 0007) that together correspond to the subscriber line unit claimed and are connected between the facsimile terminal that corresponds to the subscriber terminal claimed and the PSTN that corresponds to the transmission network claimed and have controllable transmitting level and speed (paragraph 0011) that correspond the adjustable required transmission characteristic claimed. Claim 1 further claims a recognition unit for recognizing a particular call number pattern and outputting control signals corresponding to a call number pattern. Ozeki discloses recognition of a previously contacted telephone number (Fig. 4, reference 101; paragraph 0011) that inherently includes a recognition unit and initiating action based on that recognition (Fig. 4, reference 103;

paragraph 0011) that inherently includes outputting corresponding control signals. Claim 1 further claims a control unit connected between the recognition unit and the subscriber line unit for adjusting the adjustable transmission characteristic of the subscriber line unit in dependence on the control signals from the recognition unit. Ozeki discloses setting transmitting level and transmission speed (i.e., adjustable transmission characteristics) of the modem that corresponds to the subscriber line unit claimed based on the called telephone number (abstract) that inherently includes control by signals from a recognition unit. In addition, any device connected to the telephone network must present a required termination characteristic so the terminal disclosed in Ozeki inherently presents a required termination characteristic. Evidence of this is provided in "Understanding Telephone Electronics" by Stephen J. Bigelow, p. 82, first paragraph, which describes the termination characteristic of a telephone terminal. This reference is cited as evidence of the inherency of a telephone terminal presenting a required termination characteristic in support of anticipation and not in support of obviousness under 35 USC 103. Therefore, Ozeki anticipates all elements of Claim 1.

9. Claim 5 claims the system of Claim 1 further comprising a memory unit for storing in a combinational logic table a logic combination of a transmission characteristic of the subscriber line unit with the control signals. As stated above apropos of Claim 1, Ozeki anticipates all elements of that claim. In addition, Ozeki discloses a memory section (Fig. 1, reference 2; abstract) that corresponds to the memory unit claimed and makes a correspondence between transmission level that corresponds to the transmission characteristic claimed and information corresponding to a called number that corresponds to the control signal claimed (abstract),

inherently forming a combinational logic table. Therefore, Ozeki anticipates all elements of Claim 5.

10. Claim 7 claims the system of Claim 1 further comprising an input device for inputting call number. As stated above apropos of Claim 1, Ozeki anticipates all elements of that claim. In addition, Ozeki discloses an operation display (Fig. 1, reference 3; paragraph 0006) that corresponds to the input device claimed and inputs a subscriber's number. Therefore, Ozeki anticipates all elements of Claim 7.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 4, 6, 8, 11, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozeki.

13. Claim 4 claims the system of Claim 1 wherein the subscriber line unit includes one of a coding unit having a variable coding characteristic adjustable by the control unit, a filter unit having a frequency response adjustable by the control unit, an amplifier unit having a variable gain/attenuation adjustable by the control unit and an impedance matching unit having a an impedance adjustable by the control unit. As stated above apropos of Claim 1, Ozeki anticipates all elements of that claim. In addition, as stated above apropos of Claim 1, Ozeki discloses a modem section and a network control section that together correspond to the subscriber line unit

claimed and have controllable transmitting level. Therefore, Ozeki is shown to teach all elements of Claim 4 with the exception of using a variable gain/attenuation unit to control transmitting level. Examiner has taken uncontested Official Notice in the Office action mailed on 18 March 2003 of the fact that use of a variable gain/attenuation unit to control transmit level was well-known in the art. It would have been obvious to one skilled in the art at the time of the invention to apply a variable gain/attenuation unit, as was well known, to the system taught by Ozeki for the purpose of controlling transmitting level.

14. Claim 6 claims the system of Claim 1 further comprising a computer unit programmed to calculate a logic combination of a transmission characteristic of the subscriber line unit with the control signals from those control signals. As stated above apropos of Claim 1, Ozeki anticipates all elements of that claim. In addition, Ozeki discloses a memory section (Fig. 1, reference 2; abstract) that makes a correspondence between transmission level that corresponds to the transmission characteristic claimed and information corresponding to a called number that corresponds to the control signal claimed (abstract). Therefore, Ozeki anticipates all elements of Claim 6 with the exception of using a computer to calculate the logic combination. Examiner has taken uncontested Official Notice in the Office action mailed on 18 March 2003 of the fact that use of a computer unit to perform logical calculations was well-known in the art. It would have been obvious to one skilled in the art at the time of the invention to apply a computer unit, as was well known, to the system taught by Ozeki for the purpose of more flexibly associating called numbers with transmitting levels.

15. Claim 8 is essentially similar to Claim 1, except that Claim 8 claims at least a second subscriber terminal. Mere duplication of parts has no patentable significance unless a new and

unexpected result is produced. See: In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). In this case, it would have been obvious to one skilled in the art to connect to the network a second facsimile machine with the same elements as the first machine for the purpose of providing facsimile transmission and reception with the advantages of automatic adjustment, with no unexpected result.

16. Claim 11 claims the system of Claim 8 wherein the subscriber line unit includes one of a coding unit having a variable coding characteristic adjustable by the control unit, a filter unit having a frequency response adjustable by the control unit, an amplifier unit having a variable gain/attenuation adjustable by the control unit and an impedance matching unit having a an impedance adjustable by the control unit. As stated above apropos of Claim 8, Ozeki makes obvious all elements of that claim. In addition, as stated above apropos of Claim 8, Ozeki discloses a modem section and a network control section that together correspond to the subscriber line unit claimed and have controllable transmitting level. Therefore, Ozeki is shown to make obvious all elements of Claim 11 with the exception of using a variable gain/attenuation unit to control transmitting level. Examiner has taken uncontested Official Notice in the Office action mailed on 18 March 2003 of the fact that use of a variable gain/attenuation unit to control transmit level was well-known in the art. It would have been obvious to one skilled in the art at the time of the invention to apply a variable gain/attenuation unit, as was well known, to the system made obvious by Ozeki for the purpose of controlling transmitting level.

17. Claim 12 claims the system of Claim 8 further comprising a memory unit for storing in a combinational logic table a logic combination of a transmission characteristic of the subscriber line unit with the control signals. As stated above apropos of Claim 8, Ozeki makes obvious all

elements of that claim. In addition, Ozeki discloses a memory section (Fig. 1, reference 2; abstract) that corresponds to the memory unit claimed and makes a correspondence between transmission level that corresponds to the transmission characteristic claimed and information corresponding to a called number that corresponds to the control signal claimed (abstract), inherently forming a combinational logic table. Therefore, Ozeki makes obvious all elements of Claim 12.

18. Claim 13 claims the system of Claim 8 further comprising a computer unit programmed to calculate a logic combination of a transmission characteristic of the subscriber line unit with the control signals from those control signals. As stated above apropos of Claim 8, Ozeki makes obvious all elements of that claim. In addition, Ozeki discloses a memory section (Fig. 1, reference 2; abstract) that makes a correspondence between transmission level that corresponds to the transmission characteristic claimed and information corresponding to a called number that corresponds to the control signal claimed (abstract). Therefore, Ozeki makes obvious all elements of Claim 13 with the exception of using a computer to calculate the logic combination. Examiner has taken uncontested Official Notice in the Office action mailed on 18 March 2003 of the fact that use of a computer unit to perform logical calculations was well-known in the art. It would have been obvious to one skilled in the art at the time of the invention to apply a computer unit, as was well known, to the system made obvious by Ozeki for the purpose of more flexibly associating called numbers with transmitting levels.

19. Claims 2 and 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Ozeki in view of Schwartz (US Patent 4,805,208).

20. Claim 2 claims the system of Claim 1 wherein the transmission network has an adjustable transmission characteristic, the control unit transmits an acknowledgement signal to the transmission network after the transmission characteristic of the subscriber line has been set, and the transmission network subsequently adapts its adjustable transmission characteristic to a changed transmission characteristic of the subscriber line unit. As stated above apropos of Claim 1, Ozeki anticipates all elements of that claim. Therefore, Ozeki anticipates all elements of Claim 2 with the exception of the transmission network having an adjustable transmission characteristic, the control unit transmitting an acknowledgement signal to the transmission network after the transmission characteristic of the subscriber line unit has been set, and the transmission network subsequently adapting its adjustable transmission characteristic to a changed transmission characteristic of the subscriber line unit. Schwartz discloses a system in which a network has a voice transmission mode and a data transmission mode (i.e., an adjustable transmission characteristic) (column 3, lines 6-10), a modem that corresponds to the control unit claimed transmits an answering tone that corresponds to the acknowledgement signal claimed (column 5, lines 60-64) when transmitting data as opposed to voice (i.e., after its characteristic has been set) and the network adapts to the transmission mode (i.e., adapts its transmission characteristic) accordingly (column 3, lines 6-10). It would have been obvious to one skilled in the art at the time of the invention to apply network adaptation as taught by Schwartz to the system taught by Ozeki for the purpose of increasing data transfer rates.

21. Claim 9 claims the system of Claim 8 wherein the transmission network has an adjustable transmission characteristic, the control unit transmits an acknowledgement signal to the transmission network after the transmission characteristic of the subscriber line has been set, and

the transmission network subsequently adapts its adjustable transmission characteristic to a changed transmission characteristic of the subscriber line unit. As stated above apropos of Claim 8, Ozeki makes obvious all elements of that claim. Therefore, Ozeki makes obvious all elements of Claim 9 with the exception of the transmission network having an adjustable transmission characteristic, the control unit transmitting an acknowledgement signal to the transmission network after the transmission characteristic of the subscriber line unit has been set, and the transmission network subsequently adapting its adjustable transmission characteristic to a changed transmission characteristic of the subscriber line unit. Schwartz discloses a system in which a network has a voice transmission mode and a data transmission mode (i.e., an adjustable transmission characteristic) (column 3, lines 6-10), a modem that corresponds to the control unit claimed transmits an answering tone that corresponds to the acknowledgement signal claimed (column 5, lines 60-64) when transmitting data as opposed to voice (i.e., after its characteristic has been set) and the network adapts to the transmission mode (i.e., adapts its transmission characteristic) accordingly (column 3, lines 6-10). It would have been obvious to one skilled in the art at the time of the invention to apply network adaptation as taught by Schwartz to the system made obvious by Ozeki for the purpose of increasing data transfer rates.

22. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozeki in view of Fette et al. (US Patent 5,612,948).

23. Claim 3 claims the system of Claim 1 wherein the transmission network has an adjustable transmission characteristic, the system further comprises a device connected in the transmission network for checking a transmission quality of a connection of a subscriber terminal, and if the

transmission quality is a relatively higher transmission quality, matching the transmission quality of the transmission network accordingly. As stated above apropos of Claim 1, Ozeki anticipates all elements of that claim. Therefore, Ozeki anticipates all elements of Claim 3 with the exception of the system further comprising a device connected in the transmission network for checking a transmission quality of a connection of a subscriber terminal, and if the transmission quality is a relatively higher transmission quality, matching the transmission quality of the transmission network accordingly. Fette discloses a radio, symbol rate predictor, data rate controller and symbol rate controller combination (Fig. 5, reference 60, 70, 72, 74; column 5, line 65-66, column 6, lines 42-45, 54-58) that corresponds to the device claimed and checks a bit error rate (i.e., transmission quality) of a connection to a subscriber terminal and adjusts a symbol rate (i.e., transmission quality) of the network to a maximum symbol rate consistent with (i.e., matching) the quality of the connection to the subscriber terminal (column 6, lines 4-8). It would have been obvious to one skilled in the art at the time of the invention to apply matching of network quality to subscriber connection quality as taught by Fette to the system taught by Ozeki for the purpose of conserving network bandwidth.

24. Claim 10 claims the system of Claim 8 wherein the transmission network has an adjustable transmission characteristic, the system further comprises a device connected in the transmission network for checking a transmission quality of a connection of a subscriber terminal, and if the transmission quality is a relatively higher transmission quality, matching the transmission quality of the transmission network accordingly. As stated above apropos of Claim 8, Ozeki makes obvious all elements of that claim. Therefore, Ozeki makes obvious all elements of Claim 10 with the exception of the system further comprising a device connected in the

transmission network for checking a transmission quality of a connection of a subscriber terminal, and if the transmission quality is a relatively higher transmission quality, matching the transmission quality of the transmission network accordingly. Fette discloses a radio, symbol rate predictor, data rate controller and symbol rate controller combination (Fig. 5, reference 60, 70, 72, 74; column 5, line 65-66, column 6, lines 42-45, 54-58) that corresponds to the device claimed and checks a bit error rate (i.e., transmission quality) of a connection to a subscriber terminal and adjusts a symbol rate (i.e., transmission quality) of the network to a maximum symbol rate consistent with (i.e., matching) the quality of the connection to the subscriber terminal (column 6, lines 4-8). It would have been obvious to one skilled in the art at the time of the invention to apply matching of network quality to subscriber connection quality as taught by Fette to the system made obvious by Ozeki for the purpose of conserving network bandwidth.

Response to Arguments

25. Applicant's arguments filed 25 October 2004 have been fully considered but they are not persuasive.

26. In the last paragraph on page 13 of the response filed on 25 October 2004, applicant alleges that "Ozeki does not show certain claimed features of the present invention". Examiner respectfully disagrees. The features enumerated in the paragraph are essentially the elements of Claim 1. As shown above under *Claim Rejections 35 USC 102*, Ozeki teaches all these elements.

27. In the first paragraph on page 14, applicant alleges that "the present invention is based on the object to adapt the adaptation of the transmission characteristic of the subscriber line

dependent on the transmission service or the type of transmission". Examiner respectfully disagrees. While these elements may be disclosed, the invention, as claimed does not include these limitations. As shown above under *Claim Rejections 35 USC 102*, Ozeki teaches adjustment of transmission data rate and signal level in response to the dialed number, which is within the scope of the claimed invention.

28. On pages 14 through 16, applicant continues to allege that Ozeki fails to teach the claimed invention based on elements not in the claims, for example, adjustment of a line termination characteristic (p.14), a decoder and program controlled evaluation unit (p. 15) and a directly connected recognition unit and single-purpose control unit (p. 16).

29. In the first paragraph of page 17, applicant alleges that Ozeki fails to disclose or suggest "disposing the control unit between the recognition unit and the subscriber line unit". Examiner respectfully disagrees. Because the system disclosed by Ozeki adjusts (i.e., controls) the data rate of the modem that corresponds to the subscriber line unit claimed based on recognition of a previously dialed number, the control function is clearly between the recognition function and the subscriber line unit.

30. In the last paragraph on page 17, applicant alleges that Ozeki neither discloses nor suggests "separate functional units, which interact with each other in the described manner". Examiner respectfully disagrees. As shown above, Ozeki teaches the claimed functions interacting in the claimed manner.

31. In the first paragraph on page 18, applicant alleges that "[I]n the present invention ... a specific transmission quality depending on the request of a communication subscriber is adapted by means of the adjustable transmission characteristic". Examiner respectfully disagrees. The

claims recite no such secondary result from adjustment of a transmission characteristic. Ozeki teaches adjustment of signal level and data rate, both of which are transmission characteristics.

32. In the first two paragraphs on page 19, applicant alleges that the secondary references do "not overcome the deficiencies of the primary Ozeki reference". As shown above, the Ozeki reference, either alone or in combination with other cited prior art teaches all elements of the claims.

33. In the first two paragraphs on page 19, applicant alleges that "[t]he only basis for combining [the secondary references] and Ozeki is solely hindsight". Examiner respectfully disagrees. It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

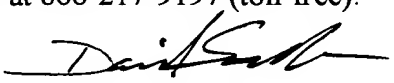
34. Applicant alleges that the dependent claims are allowable because they depend from the independent claims. Examiner respectfully disagrees. As shown above, the independent claims are anticipated or made obvious by Ozeki.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 703-305-4088. The examiner can normally be reached on Monday through Friday between 8:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A. Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel Swerdlow
Examiner
Art Unit 2644